

REMARKS

The initial Office Action mailed on March 20, 2006 (the "Office Action"), and comments therein have been fully considered. For at least all of the reasons set forth below, Applicants respectfully submit the invention as claimed is patentable over the cited art. Accordingly, reconsideration and issuance of a notice of allowance are respectfully requested.

I. Oath/Declaration

The Examiner has requested a post office address as required by 37 C.F.R. § 1.33(a). A statement over Applicants' signature providing a complete post office address is enclosed as Appendix A.

II. Specification

The Examiner has objected to the disclosure because of informalities noted on page 4 of the specification and in claims 2 and 12. Appropriate correction was made. Reconsideration is respectfully requested.

III. Claim Rejections

A. Double Patenting

The Examiner has provisionally rejected claims 1-11 and 13-17 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 11/077,070. Applicants respectfully traverse the rejection because although the claimed subject matter may be similar, Application No. 079,070 was filed after the present application thus there would be no terminal portion to disclaim. M.P.E.P. 804.03 states, in part, that "Double patenting rejections can be overcome in certain circumstances by disclaiming, pursuant to the provisions of 37 C.F.R. § 1.321(c), the terminal portion of the later

patent and including in the disclaimer a provision that the patent shall be enforceable only for and during the period the patent is commonly owned with the application or patent which formed the basis for the rejection, thereby eliminating the problem of extending patent life." This application is not a "later patent" having a terminal portion which to disclaim. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

B. Section 102(b)

1. *Wilhelm*

The Examiner has rejected claims 1-3, 6-12 and 15-17 pursuant to 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,038,071 to Wilhelm ("Wilhelm") on grounds that Wilhelm teaches "an adsorbent system comprising a paper or metal substrate (A) coated with a layer of adhesive (B) and a mono-layer of a granular adsorbent such as charcoal or silica gel (C) on one or both sides of the substrate," and "the adsorbent layer on one side of the substrate contacts a side of the substrate that does not contain adsorbent." Office Action, Page 3. Applicants respectfully traverse the rejection because, although the adsorbent system of Wilhelm has an adsorbent on one side of a substrate that contacts a side that does not contain adsorbent, that "contact" is to create open channels or passages and provide structural strength not a covered "adsorbent layer" as required by Applicants' shaped composite invention.

To anticipate a claim pursuant to 35 U.S.C. § 102, the "reference must disclose every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter." See PPG Industries v. Guardian Industries Corp., 75 F.3d 1558, 1566 (Fed. Cir. 1996) (emphasis added). See also Motorola v. Interdigital Technology Corp., 121 F.3d 1461, 1471, 43 USPQ2d 1481, 1489 (Fed. Cir. 1997). That is, the reference must expressly or inherently teach

the entire claim. Because Wilhelm neither discloses each and every element of the composite adsorbent claimed in Claims 1-3, 6-12, and 15-17, as amended, nor enables one skilled in the art to make the claimed composite, Wilhelm simply does not anticipate the present invention.

Applicants' invention claims a composite adsorbent for treatment or adsorption of gases comprised of a shaped substrate having two sides, an adhesive on a first side thereof and an adsorbent that has been immobilized as a layer on the adhesive. The adsorbent layer substantially contacts one of the sides, a portion of the adsorbent layer or a combination thereof.

Wilhelm discloses a fluid treating device comprising a sleeve-like casing using a corrugated sheet backed with a flat sheet for structural strength. The casing has a plurality of passages to permit contact of reactive material on the passage walls with air and gases. *See* Wilhelm, Column 1, line 53 to Column 2, line 9. It is arranged to create a longitudinal fluid passage thereby leaving at least 50% or more of open space such that "practically the entire body of the package, ... is formed of a group of passages..." Wilhelm, Column 3, lines 45-42. By contrast, Applicants' invention comprises a shaped substrate having an adsorbent layer that substantially contacts another portion of the adsorbent layer or one of the sides of the substrate or both, which is a shaped substrate. Applicants' shaped substrate does not incorporate any passages. Rather it is designed to be densely packed with adsorbent thereby eliminating excess open space that Wilhelm's passages were designed to create. Therefore, for at least these reasons, Wilhelm does not disclose each and every element of Applicants' invention, nor enable one of skill in the art to make it. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

2. *Kasmark*

The Examiner has rejected claims 1-3, 6-12 and 14-17 pursuant to 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,699,681 to Kasmark, Jr. *et al.* ("Kasmark") on grounds that Kasmark discloses a "gas permeable filter comprising a perforated substrate coated on one of both sides with a layer of adhesive such as a polychloroprene gel and a mono-layer of a granular adsorbent such as activated carbon or alumina" and the substrate can be stacked or rolled. Office Action, page 4. Applicants respectfully traverse the rejection because Kasmark's method provides a filter permeable through the face not linearly, directly through the adsorbent as required by Applicants' invention in claims 1-3, 6-12 and 14-17.

Kasmark discloses a method of making a gas phase permeable filter. The method requires assembling a substrate such that the "inner surface of the filter is a surface of the substrate coated with the particulate gas phase odor-removing means and the outer surface of the filter is a surface of the substrate uncoated with the particulate means." Column 2, lines 48-52. The substrate of Kasmark is porous. It must have appropriate porosity to allow gas to pass freely therethrough. Column 3, lines 29-35. This is provided as a perforated sheet so that the material to be treated can be filtered through the face of the sheet rather than linearly through the sorbent layer. In contrast, Applicants' current invention uses a non-porous substrate and the filtration takes place linearly through the sorbent.

Moreover, although Kasmark provides a substrate having adsorbent, it fails to disclose a substantially covered adsorbent as required by Applicants' invention in claims 1-3, 6-12 and 14-17.

Additionally, Kasmark's method is unduly complicated for the tasks accomplished by the current invention. The substrates disclosed in Kasmark are perforated and then the sorbent size must be larger than the size of those perforations or holes (column 3, lines 36-40). "The adhesive must be applied to the substrate in such manner as to avoid unwanted seepage through the holes." (Column 3, lines 65-66). The current invention has no such holes thereby avoiding such a complicated process. Therefore, for at least these reasons, Kasmark does not disclose each and every element of claims 1-3, 6-12 and 14-17, and thus cannot anticipate the claims. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

3. *Morris*

The Examiner has rejected claims 1, 2, 4-6 and 14-17 pursuant to 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,702,049 to Morris Jr. ("Morris") on grounds that Morris teaches an "air filter comprising a film substrate(10) made of a plastic such as polyethylene or polypropylene that is coated on one or both sides with a granular adsorbent or activated carbon by heating the substrate and adhering the adsorbent to it with a mixture of particles." Office Action, page 4. Applicants respectfully traverse the rejection on grounds that Morris requires a sheet or film such as plastic having deformations and requiring heat treatment to adhere granular adsorbent, not the adsorbent layer or integrated substrate claimed by Applicants.

Morris discloses a device for cleaning polluted air. The device comprises decontaminant granules adhered by thermal treatment on outer portions of passageways formed between plastic sheets. To achieve adherence the sheets, Morris requires the film be feed through heating units and a receptacle filled with heated granules. Morris, Column 2, lines 9-19.

By contrast, Applicants claim a composite adsorbent having two sides, an adhesive on a portion of at least a first side thereof and an adsorbent that has been immobilized as a layer on the adhesive. These features are not shown in Morris' device that lacks adhesive or integrated substrate (as in Applicants' claim 15) for instead, from a practical standpoint, a potentially problematic heat affixed granular surface shown in Morris. If under-heated the granules will not adhere to the plastic. If overheated the plastic could melt or become brittle and break under tension of the system. Moreover, Morris does not disclose a covered adsorbent layer required by Applicants' claimed invention. Thus, for at least these reasons, Morris does not disclose each and every element of claims 1, 2, 4-6 and 14-17, and thus cannot anticipate the claims. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

C. Section 103(a)

The Examiner has rejected claim 13 pursuant to 35 U.S.C. § 103(a) as being unpatentable over either one of Kasmak or Wilhelm on grounds that either one "discloses all of the limitations of the claim except that more than one of the composite adsorbents is combined. It would have been obvious to provide additional adsorbent composites to achieve additional purification based on the level of contamination and the gas flow rate." Office Action, page 5. For at least the reasons discussed above that neither Wilhelm or Kasmak disclose each and every element of Applicants' claimed invention, Applicants respectfully traverse the rejection.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. In re Piasecki, 745 F.2d 1468 (Fed. Cir. 1984). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, the reference or combination of references must teach or disclose all of the claimed limitations of the invention. See In re Zurko, 111 F.3d

887, 42 USPQ2d 1476 (Fed. Cir. 1997). Second, and of particular importance here, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2143.03. Third, if there is a teaching, suggestion, or incentive, it must motivate the skilled artisan to combine the teachings or suggestions with a reasonable expectation of success. Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure. See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2143.03. Therefore, it is improper for the Examiner to use the applicant's invention as a blueprint to hunt through the prior art for the claimed elements and then combine them as claimed. See In re Zurko, 111 F.3d 887, 42 USPQ2d 1476 (Fed. Cir. 1997).

Applicants' claim 13 is a method for making a shaped composite adsorbent including a further step of combining the composite adsorbent with one or more such composite adsorbent. Neither Kasmark or Wilhelm disclose every element of Applicants' invention in claim 13 because the substrate of Kasmark is porous and must be filtered through the face of the sheet rather than linearly through the sorbent layer, and Wilhelm requires a sleeve-like casing having a plurality passages to create open channels or passages and provide structural strength not a covered "adsorbent layer" as required by Applicants' shaped composite invention. Neither teaches or suggests the alternatives claimed by Applicants. Thus even if the devices disclosed by either Kasmark or Wilhelm were combined they would not suggest the composite adsorbents of claim 13. Accordingly, for at least these reasons they cannot form a proper basis on which to

Serial No. 10/807,375
Amdt. dated June 20, 2006
Reply to Office Action of March 20, 2006

obviate claim 13. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

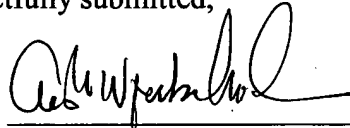
IV. Conclusion

Applicants respectfully submit that the patent application and the claims, as amended, therein are in a condition for allowance. Accordingly, allowance of all claims at an early date is solicited.

Applicants would appreciate a telephone call to the undersigned attorney of record should the Examiner have any questions or comments with respect to this Preliminary Amendment or the claim language for purposes of efficiently resolving same.

Respectfully submitted,

By



Christine W. Trebilcock
PTO Registration No. 41,373
Cohen & Grigsby, P.C.
11 Stanwix Street, 15th Floor
Pittsburgh, PA 15222
(412) 297-4900

1093716_1.DOC